

PRIMITIVE COMMUNICATION MECHANISM FOR ADJACENT NODES IN A CLUSTERED COMPUTER SYSTEM

Abstract of the Disclosure

A circuit arrangement, node, clustered computer system, and method incorporate a primitive communication mechanism for use in exchanging data between adjacent nodes coupled via a point-to-point network. A plurality of network ports are used to couple a node to other nodes in the clustered computer system over point-to-point network interconnects, and a plurality of communication registers are associated with each of the network ports for the purpose of storing data received through their associated network ports. A node desiring to communicate information to another node receives a port identifier from the other node that identifies the network port on the other node through which the pair of nodes are coupled. The port identifier is then used by the node to communicate data to the other node through the use of one or more write operations directed to the communication register on the other node that is associated with the network port identified by the port identifier. On the other node, a control circuit is used to automatically notify the other node whenever data is stored in any of its communication registers, e.g., by generating an interrupt in response to non-zero data being stored in any of such communication registers.